Studies in African Bombyliidae.

III. ON GNUMYIA FUSCIPENNIS HESSE

by

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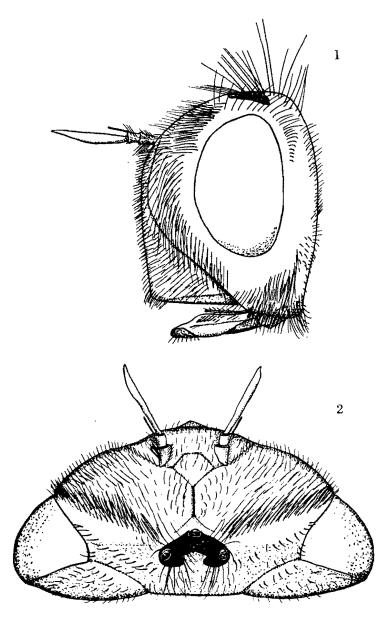
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Hesse (1938) described Gnumyia fuscipennis, the second species of the genus, from three males and remarked that females of both fuscipennis and of the genotype, G. brevirostris Bezzi (1921) were unknown. Among material received from the British Museum (Natural History), through the kind offices of Mr. H. Oldroyd, are two males of fuscipennis together with a female which is undoubtedly a Gnumyia, thus constituting the first record of a female of this genus. This female is described here as that of fuscipennis Hesse; some notes on the males are also included.

♂♂. Both differ in some details from the description given by Hesse. One is distinctly larger than Hesse's specimens, measuring 10.6 mm., with a wing length of 9.4 mm., and proboscis 1.1 mm. Antennal proportions 1.6:1:6.6, the dorsal projection of the second antennal segment being almost twice the length of the segment. General body colour as described by Hesse, the scutellum reddish. Wings with the infuscation decidedly yellowish-brown at extreme base and in costal cell, the wing pattern as described, the apical clear patch of the second basal cell large and conspicuous, coalescing with the pale central area of the first basal cell; right wing with the vein between first and third submarginal cells (i.e. base of R₄) broken in middle; left wing with this vein absent, thus only two submarginal cells present, the second formed by a vein arising from R_{2+3} , not R_5 as usual. The second male (same locality and date) is of average size, 7.0 mm., with a wing length of 6.4 mm. Face and from only obscurely brownish, first antennal segment vellowish-brown, second and third segments brownish-black except for faintly more reddish-brown base of third segment; antennal proportions 1.5:1:6.25, with the dorsal projection of the second segment 1.38 times the length of the segment. Scutellum and post-alar calli dark mahogany-brown, only slightly lighter coloured than the thorax. Wing as described by Hesse.

It is evident from these two males that the body colour is not a very reliable character for the separation of *brevirostris* and *fuscipennis*; the wings appear to afford a certain character and also, for this sex, the relative length of the first and second antennal segments.

Q. Conforming to the generic diagnosis; pubescence much less dense than in male, and with sparse, adpressed hairs on head, thorax and abdomen. Body black; head yellow, occiput more chrome-yellowish, vertex pale yellowish-



Figs. 1-2. Head of Q Gnumyia fuscipennis Hesse. Side view (1), dorsal view (2).

brown, ocellar tubercle with a conspicuous A-shaped brownish-black area connecting the three ocelli; a brownish-black spot at extreme base of buccal cavity; thorax with humeri, sides above wing bases and posterior margin at sides reddish-brown, post alar calli and scutellum reddish, pleurae with a large patch at upper posterior angle of mesopleurae, the upper third of sternopleurae. posterior half of pteropleurae, a broad band from wing base across sternopleural-hypopleural suture and metapleurae reddish-brown. Head (figs. 1 and 2) with eyes separated by a little less than 3 times width of ocellar tubercle, relatively small, facets equal; antennae with first, second and basal half of third segments brownish vellow, apical half of third segment and a narrow stripe above at base black, proportions 2:1:8.5; head with sparse, adpressed pale brassy-vellow hairs, very sparse on head behind, black erect hairs much less dense than in male and less dense again on upper part of frons and face, a slightly denser hair band running from ocellar tubercle to anterior angle of eye, black hairs on ocellar tubercle considerably longer than other erect pubescence; hairs on first two antennal segments largely black, a few pale brassy hairs above on each of these segments. Thorax with sparse, adpressed pale brassy hairs on disc and on scutellum, the erect pubescence black, very sparse, short on disc, longer on sides and upper margin of mesopleurae, pleurae otherwise with only sparse black hairs on propleurae. Abdomen with adpressed pale brassy-yellow hairs, denser than on thorax but nevertheless relatively sparse; erect pubescence black, sparse; without an apical hair brush, ovipositor spines reddish-yellow, apparently six either side. Legs as in male except that the hind tibiae are somewhat more yellowbrown, and the pubescence in general and on hind tibiae in particular much less dense, the spicules, particularly the antero-ventral row, therefore more conspicuous. Wings very distinctly more infumate than male, the basal infuscation yellow, the entire pattern brighter and more contrasting, the pale yellow band formed by the yellowish centre of the first basal cell and the coalesced clear apical patch of the second basal cell being very evident; squamae dark yellowish-brown with dark brownish fringe; halteres brown stemmed with deep yellow knobs.

Length of body 10 mm., of wings 8.6 mm., of proboscis 1.3 mm.

South Africa: Cape Province, Nels Poort, 4.xii.1933 (J. Ogilvie), coll. E. Brock.

The conspicuously yellow head and the wing pattern, more marked than in the male, make this insect most distinctive. It is immediately separable from those species of *Corsomyza* with at least conspicuously yellow frons and face by the inflate frontal and facial parts and very widely separated antennae. From the as yet unknown female of *brevirostris* it should be distinguishable by its wing pattern and probably more extensively yellow head.

All three specimens have been returned to the British Museum.

REFERENCES

BEZZI, M., 1921. Ann. S. Afr. Mus. 18: 82-3. HESSE, A. J., 1938. Ann. S. Afr. Mus. 34: 780-5.